

**REMARKS**

Claims 1-26 are pending in the present application. The Examiner has rejected claims 1-26 over U.S. Patent No. 5,983,082 ("Hilbert") in view of U.S. Patent No. 6,633,550 B1 ("Gardenfors").

**I. UNRESPONSIVE OFFICE ACTION**

The Examiner in his "Response to Arguments" section in the Office Action Made Final dated July 13, 2004 only addressed Applicants' arguments relating to the propriety of combining Hilbert and Gardenfors. The Examiner did not address an equally serious flaw in his presentation in that the Examiner did not present a *prima facie* case of obviousness. Throughout the Office Action Made Final, the Examiner often admitted that Hilbert did not teach at least some elements recited in the claims, however, the Examiner never explained how Gardenfors made up for the teaching deficiencies. Applicants have reproduced below the section entitled "Prima Facie Case of Obviousness" which was taken from the Response dated April 28, 2004. Applicants respectfully request that the Examiner address at least these arguments and others set forth below in a subsequent NON-FINAL Office Action.

**Prima Facie Case of Obviousness**

M.P.E.P. § 2142 states that

[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

Applicants respectfully submit that, for at least the above reasons, a *prima facie* case of obviousness has not been presented. Accordingly, Applicants are under no obligation to submit evidence of nonobviousness. Nevertheless, in perusing the Office Action, Applicants respectfully submit that the Office Action is, in many cases unclear, as to how Gardenfors makes up for the teaching deficiencies of Hilbert with respect to the claims.

For example, with respect to claims 1-7, the Office Action states that "Hilbert does not specifically disclose a capacitor coupled across the power input and the power return; and a first resistor having a first end coupled to the power input and a second

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end to coupled to a power source". Office Action at page 2, section 2. However, in describing the teachings of Gardenfors, the Office Action does not even mention, for example, a capacitor or a resistor as set forth in claims 1-7 or how Gardenfors teaches each and every element that Hilbert admittedly does not teach.

In another example, with respect to claims 8-16, the Office Action states that "Hilbert does not specifically disclose an isolation means for isolating the charge means from a power source". Office Action at page 4, section 2. However, in describing the teachings of Gardenfors, the Office Action does not even mention, for example, isolation means as set forth in claims 8-16 or how Gardenfors teaches each and every element that Hilbert admittedly does not teach.

In another example, with respect to claims 17-19, the Office Action states that "Hilbert does not specifically disclose the features of circulating charge between the differential outputs through the capacitor; compensating for loss of the charge on the capacitor during the circulation of charge by recharging the capacitor through the resistor". Office Action at page 5, section 2. However, in describing the teachings of Gardenfors, the Office Action does not even mention, for example, a capacitor or a resistor as set forth in claims 17-19 or how Gardenfors teaches each and every element that Hilbert admittedly does not teach.

In yet another example, with respect to claims 20-22, the Office Action states that "Hilbert does not specifically disclose an inductor having a first end coupled to the power input and a second end to couple to a power source; and a second inductor having a first end coupled to the power return and a second end to coupled to a power source return". Office Action at page 7, section 2. However, in describing the teachings of Gardenfors, the Office Action does not even mention, for example, an inductor, a power input, power return or a power source return as set forth in claims 20-22 or how Gardenfors teaches each and every element that Hilbert admittedly does not teach.

In yet still another example, with respect to claims 23-26, the Office Action states that "Hilbert does not specifically disclose a current source having an output coupled to the differential circuit, an input, and a capacitor shunting the input". Office Action at page 8, section 2. However, in describing the teachings of Gardenfors, the Office Action does not even mention, for example, a current source or a capacitor as set forth in claims 23-26 or how Gardenfors teaches each and every element that Hilbert admittedly does not teach.

For at least the above reasons, Applicants respectfully submit that a prima facie case of obviousness has not been presented with respect to claims 1-26.

Applicants respectfully request that any subsequent office action, if necessary, explain, with greater emphasis on the recited elements of the claims, how the cited references teach or suggest each and every element as set forth in the claims.

Applicants respectfully submit that by not addressing the most basic of arguments with respect to *prima facie* obviousness, the Examiner has left Applicants to merely guess as to how the Examiner is applying *Gardenfors* to teach the elements that the Examiner has admitted are not taught by *Hilbert*. Under such circumstances, Applicants respectfully submit that the Examiner issue another Office Action discussing the specifically how *Gardenfors* teaches the elements not taught by *Hilbert*. Furthermore, that Office Action should NOT be made final since it will be the *first time* that Applicants will be able to understand how the Examiner applied the references and will be the *first time* that Applicants will be able to address how the Examiner has applied *Gardenfors* to *Hilbert*.

M.P.E.P. § 706.07 states that “[b]efore final rejection is in order a clear issue should be developed between the examiner and applicant.” Applicants do not believe that a clear issue has been developed in this case.

M.P.E.P. § 706.07 also states that “[t]he examiner should never lose sight of the fact that in every case the applicant is entitled to a full and fair hearing, and that a clear issue between applicant and examiner should be developed, if possible, before appeal.”

In light of M.P.E.P. § 706.07, Applicants respectfully submit that a final rejection is inappropriate here where (1) the Examiner has not even presented a *prima facie* case of obviousness; (2) the Examiner has not explained specifically how *Gardenfors* teaches the elements that *Hilbert* does not; and (3) Applicants have not been given a chance for a full and fair hearing on the topic of how *Gardenfors* teaches the elements not taught by *Hilbert*.

It is therefore respectfully requested that a subsequent office action address these issues and the subsequent office action should be NON FINAL.

## II. CLAIMS 1-7

Applicants, as a courtesy, reproduce claim 1 herewith:

A circuit, comprising:

- a logic circuit having a power input and a power return;
- a capacitor coupled across the power input and the power return;

a first resistor having a first end coupled to the power input and a second end to couple to a power source; and

a second resistor having a first end coupled to the power return and a second end to couple to a power source return.

Applicants respectfully point out some of the elements in claim 1 that must be taught by the combination of Hilbert and Gardenfors:

**a power input;**

**a power return;**

**a power source; and**

**a power source return.**

Applicants have emphasized the power input, the power return, the power source and the power source return because the Examiner has failed to use these elements consistently and with particularity when describing the logic circuit, the capacitor, the first resistor and the second resistor.

The Examiner alleges that Hilbert and Gardenfors teach a logic circuit by disclosing a variable phase shift network 420 in Hilbert. According to claim 1, the logic circuit has "a power input and a power return". Presumably, in FIG. 8 with respect to the variable phase shift network 420 of Hilbert, the Examiner is alleging that the power input is  $V_{cc}$  and the power return is an electrical ground. Applicants state "presumably" because the Examiner does not further clarify these elements.

According to claim 1, a capacitor is "coupled across the power input and the power return". Presumably, the Examiner is alleging that a capacitor is coupled between  $V_{cc}$  and ground to be consistent with the above allegations with respect to the logic circuit. In support of the rejection, the Examiner alleges that capacitor 805 or capacitor 806 illustrated in FIG. 8 of Hilbert satisfies these elements. In FIG. 8, capacitor 805 is connected on one side to an emitter terminal of a transistor Q4 804 and on the other side to a differential signal output Y(0°) 821. Capacitor 806 is connected on the one side to an emitter terminal of a transistor Q3 803 and on the other side to a differential signal output Y(180°) 826. Thus, neither capacitor 805 nor capacitor 806 is coupled across  $V_{cc}$  and electrical ground (i.e., the power input and the power return as presumably alleged by the Examiner to be consistent with respect to allegations made with respect to the logic circuit). Thus, Hilbert does not teach capacitors coupled across the power input and the power return. *In fact, the Examiner agrees with Applicants by stating*

*"Hilbert does not specifically disclose a capacitor coupled across the power input and the power return".* Office Action at page 2. The Examiner presumably alleges that Gardenfors teaches a capacitor coupled across the power input and the power return. However, the discussion presented by the Examiner with respect to Gardenfors does not even mention a capacitor. See Office Action at pages 2 and 3. In fact, Applicants respectfully submit that Gardenfors does not even mention a capacitor anywhere in its disclosure. Of course, if the Examiner does not discuss how Gardenfors teaches a capacitor coupled across the power input and the power return and Gardenfors, itself, does not even mention a capacitor, then Applicants must respectfully disagree that the combination of Hilbert and Gardenfors teaches a capacitor coupled across the power input and the power return.

According to claim 1, a first resistor has "a first end coupled to the power input and a second end to couple to a power source". Presumably, the Examiner is alleging that a first resistor is coupled between  $V_{cc}$  and a power source to be consistent with the above allegations with respect to the logic circuit and the capacitor. In support of the rejection, the Examiner alleges that resistor 814 illustrated in FIG. 8 of Hilbert satisfies these elements. Resistor 814 has a first end connected on one side to an emitter terminal of resistor Q1 801 and a second end connected to a differential signal output Y(0°) 821. Presumably, in FIG. 8 with respect to the variable phase shift network 420 of Hilbert, the Examiner is alleging that the emitter terminal of transistor Q1 801 is a power input and that the differential signal output Y(0°) 821 is a power source. Applicants state "presumably" because the Examiner does not further clarify these elements. However, such an interpretation by the Examiner cannot be maintained since, for consistency with allegations with respect to the logic circuit and the capacitor, the Examiner has presumably already alleged that power input is  $V_{cc}$ . The power input in claim 1 cannot, at the same time, be both  $V_{cc}$  and the emitter terminal of transistor Q1 801. Furthermore, the Examiner should reconsider characterizing the differential signal output Y(0°) 821 as a power source as recited in claim 1. If not, then the Examiner is kindly requested to explain how the differential signal output Y(0°) 821 is a power source as recited in claim 1 and to provide support for such a contention. Accordingly, Hilbert does not teach a first resistor having a first end coupled to the power input and a second end to couple to a power source. *In fact, the Examiner agrees with Applicants by stating "Hilbert does not specifically disclose ... a first resistor having a first end coupled to the power input and a second end to coupled to a power source."* Office Action at

page 2. The Examiner presumably alleges that Gardenfors teaches a first resistor having a first end coupled to the power input and a second end to couple to a power source. However, the discussion presented by the Examiner with respect to Gardenfors does not even mention a resistor. See Office Action at pages 2 and 3. In fact, Applicants respectfully submit that Gardenfors does not even disclose a resistor anywhere. Of course, if the Examiner does not discuss how Gardenfors teaches a first resistor having a first end coupled to the power input and a second end to coupled to a power source and Gardenfors, itself, does not even mention a resistor, then Applicants must respectfully disagree that the combination of Hilbert and Gardenfors teaches a first resistor having a first end coupled to the power input and a second end to coupled to a power source.

According to claim 1, a second resistor has "a second resistor having a first end coupled to the power return and a second end to couple to a power source return". Presumably, the Examiner is alleging that a first resistor is coupled between electrical ground and a power source return to be consistent with the above allegations with respect to the logic circuit, the capacitor and the first resistor. In support of the rejection, the Examiner alleges that resistor 815 illustrated in FIG. 8 of Hilbert satisfies these elements. Resistor 815 has a first end connected on one side to an emitter terminal of resistor Q2 802 and a second end connected to a differential signal output Y(180°) 826. Presumably, in FIG. 8 with respect to the variable phase shift network 420 of Hilbert, the Examiner is alleging that the emitter terminal of transistor Q1 801 is a power return and that the differential signal output Y(0°) 821 is a power source return, or vice versa. Applicants state "presumably" because the Examiner does not further clarify these elements. However, such an interpretation by the Examiner cannot be maintained since, for consistency with allegations with respect to the logic circuit, the capacitor and the first resistor, the Examiner has presumably already alleged that power return is electrical ground. The power return in claim 1 cannot, at the same time, be both  $V_{cc}$  and either the emitter terminal of transistor Q2 802 or the differential signal output Y(180°) 826, the ambiguity being present because the Examiner has not clarified his interpretation of the recited elements. Furthermore, the Examiner should reconsider characterizing either the emitter terminal of transistor Q2 802 or the differential signal output Y(180°) 826 as a power source return as recited in claim 1. If not, then the Examiner is kindly requested to explain how the emitter terminal of transistor Q2 802 or the differential signal output Y(180°) 826 is a power source return as recited in claim 1 that is fully consistent

with all of the other allegations presumably made by the Examiner and to provide support for such a contention. Accordingly, Hilbert does not teach a second resistor having a first end coupled to the power return and a second end to couple to a power source return. The Examiner does not allege that Gardenfors teaches a second resistor having a first end coupled to the power return and a second end to couple to a power source return since the Examiner did not recognize this teaching deficiency in Hilbert; but presumably the Examiner will allege that Gardenfors teaches a second resistor having a first end coupled to the power return and a second end to couple to a power source return. However, the discussion presented by the Examiner with respect to Gardenfors does not even mention a resistor. See, e.g., Office Action at pages 2 and 3. In fact, Applicants respectfully submit that Gardenfors does not even disclose a resistor anywhere. Of course, if the Examiner does not discuss how Gardenfors teaches a second resistor having a first end coupled to the power return and a second end to couple to a power source return and Gardenfors, itself, does not even mention a resistor, then Applicants must respectfully disagree that the combination of Hilbert and Gardenfors teaches a second resistor having a first end coupled to the power return and a second end to couple to a power source return.

Applicants urge the Examiner to be more consistent with respect to (1) a power input, (2) a power return, (3) a power source and (4) a power source return in finding teachings relating to a logic circuit, a capacitor, a first resistor and a second resistor. It would help Applicants a great deal if the Examiner could, in the future, actually name the numbered component in the drawings to which a power input, a power return, a power source and a power source return refer.

For at least the above reasons, Applicants respectfully submit that the obviousness rejection of claim 1 and its dependent claims (i.e., claims 2-7) be withdrawn.

### **III. CLAIMS 8-16**

Applicants, as a courtesy, reproduce claim 8 herewith:

A circuit, comprising:

- logic means for performing a logic function;
- charge means for storing a charge across the logic means; and
- isolation means for isolating the charge means from a power source.

Neither Hilbert nor Gardenfors, individually or combined, teach or suggest isolation means for isolating the charge means from a power source. The Examiner has admitted that

"Hilbert does not specifically disclose an isolation means for isolating the charge means from a power source." Presumably, the Examiner alleges that Gardenfors teaches isolation means for isolating the charge means from a power source. However, the discussion presented by the Examiner with respect to Gardenfors does not even mention isolation means. See Office Action at page 4. In fact, Applicants respectfully submit that Gardenfors does not even mention isolation means and does not mention isolating charge means from a power source. The Examiner does describe a phase locked loop, but does not explain any relationship between the phase locked loop and isolating charge means from a power source. Of course, if the Examiner does not discuss how Gardenfors teaches isolation means for isolating the charge means from a power source and Gardenfors, itself, does not even mention isolation means for isolating charge means from a power source, then Applicants must respectfully disagree that the combination of Hilbert and Gardenfors teaches isolation means for isolating the charge means from a power source.

For at least the above reasons, Applicants respectfully submit that the obviousness rejection of claim 8 and its dependent claims (i.e., claims 9-16) be withdrawn.

#### **Claim 10**

Claim 10 depends from claim 8 and thus, the above reasons for withdrawing the obviousness rejection with respect to claim 8 also apply to claim 10. Claim 10 recites that "the isolation means comprises a first resistor to couple a first end of the capacitor to the power source, and a second resistor to couple a second end of the capacitor to a return line for the power source". Whether the Examiner interprets the capacitor to be (1) capacitor 805 or (2) capacitor 806, Hilbert does not teach two resistors coupled to capacitor 805 or two resistors coupled to capacitor 806. With respect to capacitor 805, resistor 814 is coupled to one side of capacitor 805, but NO resistor is coupled to the other side of capacitor 805. With respect to capacitor 806, resistor 815 is coupled to one side of capacitor 806, but NO resistor is coupled to capacitor 806. Thus, neither capacitor 805, 806 satisfies the elements as set forth in claim 10. Since Gardenfors does not even mention a single resistor anywhere in its disclosure, Gardenfors cannot make up for the teaching deficiencies of Hilbert. Even if Gardenfors did teach a resistor (which Applicants dispute), neither Gardenfors nor Hilbert teach a first resistor to coupled to a first end of a capacitor to a *power source* and a second resistor to coupled a second end of the



capacitor to *a return line for the power source*. For at least the above reasons, Applicants respectfully submit that the obviousness rejection of claim 10.

#### **Claim 11**

Claim 11 depends from claim 8 and thus, the above reasons for withdrawing the obviousness rejection with respect to claim 8 also apply to claim 11. Claim 11 recites that “the logic means comprises a differential circuit”. The Examiner has already alleged that Hilbert and Gardenfors teach logic means via a variable current controller 809 of FIG. 8 of Hilbert. Applicants respectfully direct the attention of the Examiner to FIG. 8 which illustrates the variable current controller 809 of Hilbert, the configuration is that of a current mirror. Note how the bases of the three transistors are connected and how the middle transistor is in a diode configuration. This is a classic current mirror configuration, not a differential circuit as alleged by the Examiner. The Examiner need only attempt to identify the differential inputs of the variable current controller 809 of Hilbert to understand that the variable current controller 809 is not a differential circuit. For at least the above reasons, Applicants respectfully submit that the obviousness rejection of claim 11.

#### **Claim 14**

Claim 14 depends indirectly from claim 8 and thus, the above reasons for withdrawing the obviousness rejection with respect to claim 8 also apply to claim 14. Claim 14 recites in combination with claims 11-13 that the two logic gates of the differential circuit of the logic means each comprises an inverter. The Examiner has already alleged that Hilbert and Gardenfors teach logic means via a variable current controller 809 of FIG. 8 of Hilbert. As discussed with respect to claim 10, the variable current controller 809 of FIG. 8 of Hilbert does not teach a differential circuit and certainly does not teach a differential circuit with two logic gates, each logic gate comprising an inverter (i.e., as alleged, the Examiner maintains, despite credible evidence to the contrary, that the variable current controller 809 of FIG. 8 of Hilbert is logic means that include a differential circuit which includes two gates, the two gates each comprising an inverter). Applicants respectfully submit that the variable current controller 809 does not teach a logic means comprising a differential circuit, the differential circuit comprising two gates, the two gates each comprising an inverter. For at least the above reasons, Applicants respectfully submit that the obviousness rejection of claim 14.

#### **Claim 16**

Claim 16 depends from claim 15 which depends from claim 14 which depends from claim 13 which depends from 12 which depends from claim 11 which depends from claim 8. Thus, the CMOS inverters recited in claim 15 are part of the two logic gates of claim 15 which are part of the differential circuit of claim 12 which is part of the logic means of claim 11 which depends from claim 8. *For consistency, the Examiner must use the same element for logic means in claim 8 as is used in claim 16 since claim 16 indirectly depends from claim 8.* The Examiner has not done this. The CMOS inverters **MUST** be a subset of the variable current controller 809 as alleged by the Examiner since, in claim 8, the Examiner alleged that the logic means was merely the variable current controller 809. The Examiner cannot now in a *dependent* claim use the *expansive* interpretation that the logic means as the variable phase shift network 420 as alleged now by the Examiner. Office Action at page 3. The variable phase shift network 420 is NOT a subset of the variable current controller 809. It is the other way around. *Accordingly, the Examiner has provided an argument that cannot logically be maintained.* If claim 16 were an independent claim, the Examiner could present the arguments found in the Office Action at page 3, but claim 16 depends, indirectly or directly, from claims 8 and 11-15. Thus, the Examiner is limited to his initial argument that the variable current controller 809 comprises the elements as set forth in claim 16. The variable current controller 809 does not teach or suggest at least, for example, CMOS inverters, an n-channel transistor and a p-channel transistor, and a differential circuit. For at least the above reasons, Applicants respectfully submit that the obviousness rejection of claim 14.

#### IV. CLAIMS 17-19

Applicants, as a courtesy, reproduce claim 17 herewith:

A method of suppressing noise during the switching of a differential circuit having differential inputs and differential outputs, comprising:  
charging a capacitor through a resistor;  
applying a signal transition at the differential inputs; and  
circulating charge between the differential outputs through the capacitor.

Neither Hilbert nor Gardenfors, individually or combined, teaches or suggests a method of suppressing noise *during the switching of a differential circuit* having differential inputs and outputs. The Examiner alleges that a method of suppressing noise *during the switching of a differential circuit* is illustrated in FIGS. 3 and 8 of Hilbert. Although Hilbert and Gardenfors

might possibly comment on noise reduction generally, Hilbert and Gardenfors do not teach or suggest suppressing noise *during the switching of a differential circuit*. Thus, while the Examiner may allege that capacitors 805 or 806 are charged through a resistor 814 of Hilbert, the Examiner has provided no proof that the charging of capacitor 805 or 806 is part of a method for suppressing noise during the switching of a differential circuit. Thus, while the Examiner may allege that Hilbert teaches or suggests applying a signal transition at the differential inputs, the Examiner has provided no proof that the applying of a signal transition at differential inputs is part of a method for suppressing noise *during the switching of a differential circuit*. Furthermore, while the Examiner may allege that Gardenfors teaches or suggests circulating charge between the differential outputs through the capacitor, the Examiner has provided no proof that the circulating of charge between differential outputs through the capacitor is part of a method of suppressing noise *during the switching of a differential circuit*. Accordingly, it is respectfully requested that the obviousness rejection of claim 17 and its dependent claims (i.e., claims 18 and 19) be withdrawn.

Neither Hilbert nor Gardenfors, individually or combined, teaches or suggests circulating charge between the differential outputs through the capacitor. The Examiner has admitted that Hilbert does not teach at least these elements by stating that "Hilbert does not specifically disclose the features of circulating charge between the differential output through the capacitor". Office Action at page 5. The Examiner presumably alleges that Gardenfors teaches circulating charge between the differential outputs through the capacitor. However, the discussion presented by the Examiner with respect to Gardenfors does not even mention circulating charge. See Office Action at pages 5 and 6. In fact, Applicants respectfully submit that Gardenfors does not even mention circulating charge and certainly does not describe circulating charge between differential outputs through a capacitor as set forth in claim 17. *As mentioned previously, Gardenfors does not even mention a capacitor anywhere, so how can Gardenfors teach circulating charge between differential outputs through a capacitor as set forth in claim 17.* Of course, if the Examiner does not discuss how Gardenfors teaches circulating charge between differential outputs through a capacitor and Gardenfors, itself, does not even mention circulating charge through a capacitor, then Applicants must respectfully disagree that the combination of Hilbert and Gardenfors teaches circulating charge between differential outputs through a

capacitor. Accordingly, it is respectfully requested that the obviousness rejection of claim 17 and its dependent claims (i.e., claims 18 and 19) be withdrawn.

#### **Claim 19**

Claim 19 depends indirectly from claim 17 and thus, the above reasons for withdrawing the obviousness rejection with respect to claim 17 also apply to claim 19. Claim 19 recites clocking the differential circuit after a transition of the signal at the differential output, the circulation of the charge being initiated by clocking the differential circuit, the resistor and capacitor having a time constant that is less than half the clocking frequency. The Examiner alleges that col. 7, line 28 to col. 8, line 67 of Hilbert teaches each and every one of these elements. Although Hilbert teaches inputting a differential clock signal into signal inputs  $V(0^\circ)$  and  $V(180^\circ)$  to produce two sets of outputs  $X(0^\circ)$  and  $X(180^\circ)$  and  $Y(0^\circ)$  and  $Y(180^\circ)$ , nowhere does Hilbert nor Gardenfors teach clocking a differential circuit after a transition of the signal at the differential output. Furthermore, Hilbert and Gardenfors do not teach initiating the circulation of charge by clocking the differential circuit. Finally, Hilbert and Gardenfors do not teach a resistor and capacitor in the context of claim 19, which depends from claims 18 which depends from claim 17, in which the resistor and the capacitor have a time constant that is less than half the clocking frequency. In fact, neither Hilbert nor Gardenfors even mentions time constants. Accordingly, it is respectfully requested that the obviousness rejection of claim 19 be withdrawn.

#### **V. CLAIMS 20-22**

Applicants, as a courtesy, reproduce claim 20 herewith:

An integrated circuit, comprising:

    a differential circuit having a power input; and  
    an inductor having a first end coupled to the power input and a second end to couple to a power source.

Neither Hilbert nor Gardenfors, individually or combined, teaches or suggests an inductor having a first end coupled to a power input of a differential circuit and a second end to coupled to a power source. The Examiner admits that "Hilbert does not specifically disclose an inductor having a first end coupled to the power input and a second end to coupled to a power source". Office Action at page 6. The Examiner presumably alleges that Gardenfors teaches an inductor having a first end coupled to a power input of a differential circuit and a second end to coupled

to a power source. However, the discussion presented by the Examiner with respect to Gardenfors does not even mention an inductor. See Office Action at pages 6 and 7. In fact, Applicants respectfully submit that Gardenfors does not teach an inductor coupled to a differential circuit and a power source. Of course, if the Examiner does not discuss how Gardenfors teaches an inductor having a first end coupled to a power input of a differential circuit and a second end to coupled to a power source and Gardenfors, itself, does not appear to teach an inductor coupled to a differential circuit and a power source, then Applicants must respectfully disagree that the combination of Hilbert and Gardenfors teaches an inductor having a first end coupled to a power input of a differential circuit and a second end to coupled to a power source. Accordingly, it is respectfully requested that the obviousness rejection of claim 20 and its dependent claims (i.e., claims 21 and 22) be withdrawn.

#### **Claim 21**

Claim 21 depends indirectly from claim 20 and thus, the above reasons for withdrawing the obviousness rejection with respect to claim 20 also apply to claim 21. Claim 21 recites “wherein the differential circuit further comprises a power return, the integrated circuit further comprising a second inductor having a first end coupled to the power return and a second end to couple to a power source return”. To summarize some elements of claims 20 and 21, a *differential circuit* comprises a **power input** and a **power return**. A *first inductor* has a first end coupled to the power input and a second end to couple to a **power source**. A *second inductor* has a first end coupled to the power return and a second end to coupled to a **power source return**.

Applicants agree with the Examiner that “Hilbert does not specifically disclose an inductor having a first end coupled to the power input and a second end to couple to a power source; and a second inductor having a first end coupled to the power return and a second end to coupled to a power source return.” Office Action at page 6. The Examiner presumably alleges that Gardenfors teaches a first inductor and a second inductor disposed as set forth in claims 20 and 21 with respect to (1) a power input, (2) a power return, (3) a power source and (4) a power source return. However, the discussion presented by the Examiner with respect to Gardenfors does not even mention an inductor or inductors. The discussion presented by the Examiner with respect to Gardenfors does not even mention a power input, a power return, a power source and a power source return. Office Action at pages 6 and 7. In fact, Applicants respectfully submit that

Gardenfors does not teach a first inductor and a second inductor as set forth in claims 20 and 21 with respect to (1) a power input, (2) a power return, (3) a power source and (4) a power source return. Of course, if the Examiner does not discuss how Gardenfors teaches a first inductor and a second inductor as set forth in claims 20 and 21 with respect to (1) a power input, (2) a power return, (3) a power source and (4) a power source return and Gardenfors, itself, does not appear to teach a first inductor and a second inductor as set forth in claims 20 and 21 with respect to (1) a power input, (2) a power return, (3) a power source and (4) a power source return, then Applicants must respectfully disagree that the combination of Hilbert and Gardenfors teaches a first inductor and a second inductor as set forth in claims 20 and 21 with respect to (1) a power input, (2) a power return, (3) a power source and (4) a power source return. Accordingly, it is respectfully requested that the obviousness rejection of claim 21.

#### **Claim 22**

Claim 22 depends indirectly from claim 20 and thus, the above reasons for withdrawing the obviousness rejection with respect to claim 20 also apply to claim 22. Claim 22 recites "wherein the inductor comprises a spiral inductor".

The Examiner does not even discuss a **spiral inductor**. Neither Hilbert nor Gardenfors mentions a spiral inductor. Applicants respectfully submit that neither Hilbert nor Gardenfors, individually or combined, teaches a spiral inductor. Accordingly, it is respectfully requested that the obviousness rejection of claim 22.

#### **VI. CLAIMS 23-26**

Applicants, as a courtesy, reproduce claim 23 herewith:

A circuit, comprising:

    a differential circuit; and

    a current source having an output coupled to the differential circuit, an input, and a capacitor shunting the input.

Neither Hilbert nor Gardenfors, individually or combined, teaches or suggests a capacitor shunting an input of a current source that is coupled to a differential circuit. Even the Examiner admits that "Hilbert does not specifically disclose a current source having an output coupled to the differential circuit, an input, and a capacitor shunting the input". Presumably, the Examiner alleges that Gardenfors teaches, for example, a capacitor shunting an input of a current source that is coupled to a differential circuit. However, the discussion presented by the Examiner, with

respect to Gardenfors, does not even mention a capacitor and certainly does not mention a capacitor shunting an input of a current source. See Office Action at pages 7 and 8. In fact, Applicants respectfully submit that Gardenfors does not even mention a capacitor anywhere. Of course, if the Examiner does not discuss how Gardenfors teaches a capacitor shunting an input of a current source that is coupled to a differential circuit and Gardenfors, itself, does not even mention a capacitor, then Applicants must respectfully disagree that the combination of Hilbert and Gardenfors teaches a capacitor shunting an input of a current source that is coupled to a differential circuit. Accordingly, it is respectfully requested that the obviousness rejection of claim 23 and its dependent claims (i.e., claims 24-26) be withdrawn.


#### VII. CONCLUSION

In view of at least the foregoing, it is respectfully submitted that the pending claims 1-26 are in condition for allowance. Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the below-listed telephone number.

Please charge any required fees not paid herewith or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Dated: September 13, 2004

Respectfully submitted,

  
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Michael T. Cruz  
Reg. No. 44,636

McAndrews, Held & Malloy, Ltd.  
500 West Madison Street, 34th Floor  
Chicago, Illinois 60661-2565  
Telephone: (312) 775-8084  
Facsimile: (312) 775-8100